

IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the present application.

1. (Currently amended) A transdermal delivery system (TDS) comprising a backing layer, a self-adhesive matrix containing an amine-functional drug, and a protective foil or sheet to be removed prior to use, wherein the self-adhesive matrix comprises a solid or semisolid semi-permeable polymer
  - (1) wherein an amine functional drug in its free base form is incorporated,
  - (2) which comprises ~~a multitude of microreservoirs~~ within the matrix  $10^3$  to  $10^9$  microreservoirs per cm<sup>2</sup> of the surface of the matrix, said microreservoirs containing the amine functional drug ~~and optionally at least a crystallization inhibitor~~,
  - (3) which is permeable to the free base of the amine functional drug,
  - (4) which is substantially impermeable to the protonated form of the amine functional drug, and
  - (5) wherein ~~the maximum diameter of~~ the microreservoirs have a maximum diameter that is less than the thickness of the matrix and is not greater than 35  $\mu\text{m}$ ;
- and wherein the backing layer is inert to the components of the matrix.
2. (Currently amended) The TDS of claim 1, wherein ~~the mean diameter of~~ the microreservoirs ~~[[is]]~~ have a mean diameter in the range of 0.5 to 20  $\mu\text{m}$ .
3. (Previously presented) The TDS of claim 1, wherein the amine functional drug has an octanol/water partitioning coefficient ( $\log p$ )  $\geq 2.8$  at pH 7.4.
4. (Previously presented) The TDS of claim 1, wherein the amine functional drug has a pKa of 7.4 to 8.4.
5. (Previously presented) The TDS of claim 1, wherein the amine functional drug is a dopamine D2 receptor agonist.
6. (Previously presented) The TDS of claim 5, wherein the dopamine D2 receptor agonist

is an aminotetralin compound.

7. (Canceled)
8. (Previously presented) The TDS of claim 1, wherein the amine functional drug is an anticholinergic drug.
9. (Previously presented) The TDS of claim 8, wherein the anticholinergic drug is oxybutynin.
10. (Previously presented) The TDS of claim 1, wherein the self-adhesive matrix is free of particles that can absorb salts of the amine functional drug at the TDS/skin interface.
11. (Previously presented) The TDS of claim 1, wherein the polymer matrix comprises a silicone pressure sensitive adhesive.
12. (Previously presented) The TDS of claim 1, wherein the polymer matrix comprises two or more silicone pressure sensitive adhesives as the main adhesive components.
13. (Previously presented) The TDS of claim 12, wherein the silicone pressure sensitive adhesive is a blend of a high tack silicone pressure sensitive adhesive comprising polysiloxane with a resin and a medium tack silicone pressure sensitive adhesive comprising polysiloxane with a resin.
14. (Previously presented) A method for treatment of a patient suffering from a disease treatable with an amine functional drug, comprising applying the TDS of claim 1 to the skin of the patient.
15. (New) The TDS of claim 1, wherein the microreservoirs additionally contain at least one crystallization inhibitor comprising soluble polyvinylpyrrolidone, a copolymer of polyvinylpyrrolidone and vinyl acetate, polyethylene glycol, polypropylene glycol, glycerol, a fatty acid ester of glycerol and/or a copolymer of ethylene and vinyl acetate.
16. (New) The TDS of claim 15, wherein the at least one crystallization inhibitor comprises soluble polyvinylpyrrolidone.
17. (New) The TDS of claim 1, comprising within the matrix  $10^6$  to  $10^9$  microreservoirs per

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cm<sup>2</sup> of the surface of the matrix.

18. (New) The TDS of claim 1, wherein the maximum diameter of the microreservoirs is 2.5 to 30  $\mu\text{m}$ .